

**ALTERNATING CURRENTS
OF ELECTRICITY AND THE
THEORY OF
TRANSFORMERS**

Published @ 2017 Trieste Publishing Pty Ltd

ISBN 9780649507832

Alternating Currents of Electricity and the Theory of Transformers by Alfred Still

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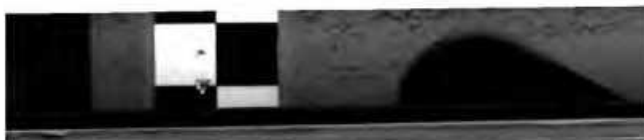
1 WHITE HART STREET, PATERNOSTER SQUARE, LONDON
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PRINTED BY
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PREFACE

ALTHOUGH the literature of alternating currents has been considerably added to of late years, the author believes that there is still room for a small book—such as the present one—in which the principles determining the behaviour of single phase alternating currents under various conditions are considered less from the scientist's point of view, and more from an engineering standpoint, than is usually the case.

The book has been written, not only for engineering students, but also for those engineers who are but slightly acquainted with alternating current problems; or who, though their practical knowledge of the subject may be extensive, are yet anxious to get an elementary but sufficiently accurate idea of the leading principles involved, which will enable them to solve many—if not

the greater number—of the problems likely to arise in practice.

On account of the unsuitability of analytical methods for the solution of alternating current problems, graphical methods have been used throughout; and the introduction of mathematics has been entirely avoided.

The thanks of the author are due to the 'Electrician' Printing and Publishing Company, who have kindly allowed him to use some of the blocks illustrating his articles on 'Principles of Transformer Design' which appeared in the 'Electrician' in November 1894.

BOWGREEN FARM, BOWDON, CHESHIRE:
March 1898.



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